

Patent Claims:

1. A supply device for the supply of pressure fluid into at least one vehicle brake, into a pressure fluid reservoir or into a pressure fluid accumulator, with a pressure fluid inlet and a pressure fluid outlet as well as with the following features:

a piston (2) is movably arranged in an accommodating member and has at least two hydraulically active diameters (D1, D2) for the supply in the direction of the pressure fluid outlet,

at least one non-return valve (7, 12; 27) is used for the ventilation of a working chamber (11) into which the piston (2) is immersed,

c h a r a c t e r i z e d in that

the piston (2) has a multi-part design and comprises at least two synchronously movable partial pistons (13, 14; 13, 24), with the first partial piston (13) exhibiting the first hydraulically active diameter (D1), and the second partial piston (14; 24) exhibiting the second hydraulically active diameter (D2).

2. The supply device as claimed in claim 1,
c h a r a c t e r i z e d in that the first partial piston (13) is provided as a rolling bearing needle, and in that the second partial piston (14; 24) is provided as

a metal part shaped in chipless forming or as a molded plastic part.

3. The supply device as claimed in claims 1 and 2,
c h a r a c t e r i z e d in that the first partial piston (13) and the second partial piston (14; 24) are arranged and guided so as to be movable directly in the accommodating member (4).
4. The supply device as claimed in claims 1 and 2,
c h a r a c t e r i z e d in that a sealing element (15, 16) is associated in each case with the first and the second partial piston (13, 14; 24) for sealing the working chamber (11).
5. The supply device as claimed in claim 1,
c h a r a c t e r i z e d in that the second partial piston (14; 24) includes a sealing seat (10) for a valve member (8) of the non-return valve (7).
6. The supply device as claimed in claim 1,
c h a r a c t e r i z e d in that the non-return valve (7) is integrated into the second partial piston (14).
7. The supply device as claimed in claim 1,
c h a r a c t e r i z e d in that the non-return valve (7; 27) is configured as a suction valve, and in that another non-return valve (12) designed as a pressure valve is provided, having a sealing seat (18) provided at a base member (17) that includes a casing (20) in which the second partial piston (14; 24) is received.

8. The supply device as claimed in claim 7,
c h a r a c t e r i z e d in that the casing (20) has a
stop (22) at its end for securing the sealing element (15)
in position in the bore (3) of the accommodating member
(4).
9. The supply device as claimed in claim 1,
c h a r a c t e r i z e d in that the second partial
piston (24) is designed as a ball, and in that the ball is
arranged and guided in a casing (20) of a base member (17)
for a non-return valve (12).
10. The supply device as claimed in claim 9,
c h a r a c t e r i z e d in that the non-return valve
(7) is designed as an integral sleeve-type non-return
valve.